

CLAIM OR CLAIMS

WE CLAIM:

1. A method for controlling crown gall disease on plants, said method comprising the step of introducing onto the plant an effective amount of a biologically pure culture of an α -proteobacteria strain that produces trifolitoxin.
2. The method of claim 1 wherein the α -proteobacteria strain is a strain of *Agrobacterium* bacteria.
3. The method of claim 2 wherein the strain of *Agrobacterium* bacteria is *Agrobacterium vitis*.
4. The method of claim 3 wherein the strain of *Agrobacterium* bacteria is the strain *Agrobacterium vitis* F2/5 (pT2TFXK), ATCC Patent Deposit Designation PTA-2356.
5. The method of claim 1 wherein the α -proteobacteria strain is genetically engineered to express the *tx* operon.
6. The method of claim 1 wherein the α -proteobacteria strain is genetically engineered to express SEQ ID NO:1.
7. The method of claim 1 wherein the α -proteobacteria strain is genetically engineered to express a pT2TFXK plasmid.
8. The method of claim 1 wherein the plant is either a grape plant, a fruit tree or a rose plant.
9. The method of claim 1 wherein the plant is a seed.

10. A method for controlling crown gall disease on plants, said method comprising the step of introducing onto the plant an effective amount of an α -proteobacteria strain engineered to produce trifolitoxin.

11. The method of claim 10 wherein the α -proteobacteria strain is a strain of *Agrobacterium* bacteria.

12. The method of claim 11 wherein the strain of *Agrobacterium* bacteria is *Agrobacterium vitis*.

13. The method of claim 12 wherein the strain of *Agrobacterium* bacteria is the strain *Agrobacterium vitis* F2/5 (pT2TFXK), ATCC Patent Deposit Designation PTA-2356.

14. The method of claim 10 wherein the α -proteobacteria strain is genetically engineered to express the *tfx* operon.

15. The method of claim 10 wherein the α -proteobacteria strain is genetically engineered to express SEQ ID NO:1.

16. The method of claim 10 wherein the α -proteobacteria strain is genetically engineered to express a pT2TFXK plasmid.

17. The method of claim 10 wherein the plant is either a grape plant, a fruit tree or a rose plant.

18. The method of claim 10 wherein the plant is a seed.

19. A biocontrol agent for controlling crown gall disease comprising an α -proteobacteria strain bacteria genetically engineered to produce trifolitoxin.

20. The biocontrol agent of claim 19 wherein the α -proteobacteria strain is a strain of *Agrobacterium* bacteria.

21. The biocontrol agent of claim 20 wherein the strain of *Agrobacterium* bacteria is *Agrobacterium vitis*.

22. The biocontrol agent of claim 21 wherein the strain of *Agrobacterium* bacteria is *Agrobacterium vitis* F2/5 (pT2TFXK), ATCC Patent Deposit Designation PTA-2356.

23. The biocontrol agent of claim 19 wherein the α -proteobacteria strain is genetically engineered to express the *tfx* operon.

24. The biocontrol agent of claim 19 wherein the α -proteobacteria strain is genetically engineered to express SEQ ID NO:1.

25. The biocontrol agent of claim 19 wherein the α -proteobacteria strain is genetically engineered to express a pT2TFXK plasmid.

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